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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/779,666	02/18/2004	Ryoji Katsuma	118743	8531
25944	7590	08/23/2005	EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			KOVAL, MELISSA J	
			ART UNIT	PAPER NUMBER
			2851	

DATE MAILED: 08/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/779,666

Applicant(s)

KATSUMA ET AL.

Examiner

Melissa J. Koval

Art Unit

2851

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 August 2005.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2 and 4-34 is/are pending in the application.  
4a) Of the above claim(s) 6-17 and 23-34 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1,2,4,5 and 18-22 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 06 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date July 6, 2004.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election with traverse of Species I, drawn to Figures 1 through 3, 4(a), 4(b) and 11, and claims 1, 2, 4, 5 and 18-22, in the reply filed on July 8, 2005 is acknowledged. Claim 3 was cancelled by Applicant. The traversal is on the ground(s) that the search should not be burdensome to the examiner. This is not found to be persuasive without arguments to support the absence of species of the invention. Applicant's specification, The Description of the Drawings, describes at least six embodiments. The Examiner must consider each and every limitation of every claim to make a proper rejection. The Examiner may be required to apply a variety of references from the same or different arts to address each species claimed. The Examiner asserts that in the present case, a proper and thorough examination of each invention claimed would be burdensome.

The requirement is still deemed proper and is therefore made FINAL.

Claims 6-17 and 23-34 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on July 8, 2005.

### ***Specification***

Applicant is reminded of the proper language and format for an abstract of the disclosure.

Art Unit: 2851

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract of the disclosure is objected to because it exceeds 150 words.

Correction is required. See MPEP § 608.01(b).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4, 5, and 18 through 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2001-125195 A (Hitachi Ltd.) in view of Watanabe U.S. Patent 6,523,960 B2.

Claim 1 sets forth: "A light source, comprising:

a lamp which emits light (arc lamp 1);

a concave mirror which reflects the light emitted from the lamp and has an

opening part which issues the light (reflecting mirror 7); and

a light permeable member which covers the opening part of the concave mirror (Mesh network 5a and windshield 6);

the concave mirror including a permeable port (See lamp house described in section [0017], for example.), a mesh covering the permeable port, and a protective wall to protect the mesh, which is arranged in a position to prevent direct collision between the mesh and broken pieces of the lamp resulting from the lamp bursting the protective wall being arranged in a position to prevent direct collision between the mesh and the broken pieces of the lamp that have bounced by the collision with the light permeable member.”

The prior art of record JP 2001-125195 A (Hitachi Ltd.) shows all of the elements of claim 1 except that it is not clear from the teaching that the positioning of the protective wall is for the following purpose: “to prevent direct collision between the mesh and broken pieces of the lamp resulting from the lamp bursting the protective wall being arranged in a position to prevent direct collision between the mesh and the broken pieces of the lamp that have bounced by the collision with the light permeable member.” Section [0021] through [0025] of JP 2001-125195 A discuss what happens to the device if the arc lamp bursts and shatters.

Figures 8 and 9 of Watanabe '960 B 2 show a permeable protective structure for an illumination device in a projection system that offers protection to the system by providing scatter prevention of broken pieces should the lamp burst. See column 8, lines 31 through 61 wherein elements shown in Figures 7 and 8 are discussed in detail. Also see the SUMMARY OF THE INVENTION of '960 B2.

It would have been obvious to one having ordinary skill in the art at the time that the invention was made to include protective structure such as that shown by Watanabe '960 B2 with the device taught in JP 2001-125195 A (Hitachi Ltd.), at a location for protecting the mesh cover, thus meeting the limitations of claim 1. The motivation for one having ordinary skill in the art to make such an addition would be to both extend the life of the projection system housing the illumination device as claimed by applicant and also to protect the device's operator.

Claims 2, 4,5, 19 through 22 are rejected for the same reasons already applied to claim 1. It is not clear to the Examiner how the details of the orientation of parts in said claims patentably distinguishes over the prior art of record.

Claim 18 sets forth: "A projector, comprising:  
the light source according to claim 1, an electro-optic modulator which modulates the emergent ray from the light source according to image signals; and  
a projecting optical system which projects and displays the modulated light from the electro-optic modulator." See section [0011] of JP 2001-125195 A. Watanabe '960 B2 also teaches a projection optical system in detail that include the notoriously well known elements of a projecting optical system and electro-optic modulator.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kurosawa U.S. Patent 6,345,896 B1 teaches a projector capable of easily replacing and efficiently cooling light source.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melissa J. Koval whose telephone number is (571) 272-2121. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on (571) 272-2258. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MJK

A handwritten signature in black ink, appearing to read "Melissa J. Koval". The signature is stylized with large, sweeping loops and is written over a faint, larger version of the same signature.